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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,464	02/05/2001	Cheol-Hong An	Q62512	1569
7590	06/18/2004		EXAMINER	
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3202			PERILLA, JASON M	
			ART UNIT	PAPER NUMBER
			2634	H
DATE MAILED: 06/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/775,464	AN, CHEOL-HONG	
	Examiner	Art Unit	
	Jason M Perilla	2634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 05 February 2001.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) 1,2,5-16,18 and 19 is/are allowed.
 6) Claim(s) _____ is/are rejected.
 7) Claim(s) 3,4 and 17 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 05 February 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____
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DETAILED ACTION

1. Claims 1-19 are pending in the instant application.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Because the true purpose of the invention is related to the detection of a *change in the data rate*, it is requested that the title of the invention is amended to reflect the detection of a change in the data rate.

Claim Objections

4. Claims 3, 4, and 17 are objected to because of the following informalities:

Regarding claim 3, the claim is objected to because the apparatus is different from that disclosed in the specification. On page 9, lines 1-5 of the specification, it is disclosed that the absolute difference between the low-pass filtered value of one isochronous period and the sampled value of one isochronous period is divided by the sampled value of the isochronous period. However, the claim provides that the absolute difference is divided by the low-pass filtered value. The specification should provide antecedent basis for the claims, and it is suggested that one of the claims or the specification is amended so that the claims limitations and the disclosure of the invention according to the specification agree.

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Regarding claim 5, the claim is objected to because the apparatus is different from that disclosed in the specification. On page 9, lines 1-5 of the specification, it is disclosed that the absolute difference between the low-pass filtered value of one isochronous period and the sampled value of one isochronous period is divided by the sampled value of the isochronous period. However, the claim provides that the absolute difference is divided by the low-pass filtered value. The specification should provide antecedent basis for the claims, and it is suggested that one of the claims or the specification is amended so that the claims limitations and the disclosure of the invention according to the specification agree.

Regarding claim 17, a space should be inserted in "step(a)" to correctly read as – step (a)--.

Appropriate correction is required.

Allowable Subject Matter

5. Indication of allowable subject matter is made regarding claims 1-19.
6. The following is a statement of reasons for the indication of allowable subject matter:

The instant application is unique among the prior art references cited because it presents a novel technique to interpret a change in a data rate. The instant application discloses the use of a data rate capture unit which is sampled. Because a comparison is made between the sampled data rate value and a filtered version of the sampled data rate, it is possible for the error calculation unit to take note of a *change in the data rate* which is present due to the difference between the filtered and non-filtered values.

Because the filtered value of the sampled data rate tracks (figs. 2A & 2B) the sampled value, there is a discrepancy when a change of the data rate occurs, and the error calculation unit is able to thereby take note of the change in the data rate which occurs.

Conclusion

7. This application is in condition for allowance except for the claims objections described above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art of record is cited to show the state of the art with respect to detecting a change in a data rate.

U.S. Pat. No. 5657347 to Mori.

U.S. Pat. No. 5825761 to Tanaka et al.

U.S. Pat. No. 5612966 to Lee.

U.S. Pat. No. 6167079 to Kinnunen et al.

U.S. Pat. No. 4887280 to Reisenfeld.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Perilla whose telephone number is (703) 305-0374. The examiner can normally be reached on M-F 8-5 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Chin can be reached on (703) 305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason M. Perilla
June 3, 2004

jmp



STEPHEN CHIN
SUPERVISORY PATENT EXAMINEE
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